CLINTON Electronics

Single Channel Mini DVR with Built-In Camera

RP1

CLINTON Electronics

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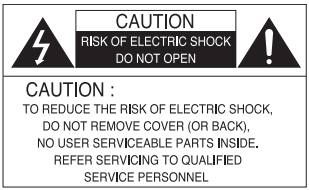

The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : To prevent electric shock and risk of fire hazards:
- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

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Warning

The camera requires periodic inspection.

Contact an authorised technician to carry out the inspection.

Stop using your camera when you find it malfunctioning.

If the camera emits smoke or is unusually hot for a long period, a fire may be caused.

Do not install the camera on a surface that can not support it.

If the camera is installed on an inappropriate surface, it may fall and cause injury.

Do not hold plug with wet hands.

It could cause an electric shock.

Do not disassemble the camera.

It may result in an electric shock or other hazards.

Do not use the camera close to a gas or oil leak.

It may result in a fire or other hazards.

Precautions

Do not install the camera in extreme temperature conditions.

Only use the camera under conditions where temperatures are between 41°F ~ 104°F. Be especially careful to provide ventilation when operating under high temperatures.

Do not install or use the camera in an environment where the humidity is high.

It can cause the image quality to be poor.

Do not install the camera under unstable lighting conditions.

Severe lighting change or flicker can cause the camera to work improperly.

Do not touch the front lens of the camera.

This is one of the most important parts of the camera. Be careful not to leave fingerprints on the lens cover.

Do not drop the camera or subject it to physical shocks.

It can cause malfunctions to occur.

Never keep the camera pointed directly at strong light.

It can damage the CCD.

Do not expose the camera to rain or spill beverage on it.

If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic components.

Do not expose the camera to radioactivity.

If exposed to radioactivity the CCD will fail.

Notes

- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Check that the power satisfies the normal specification before connecting the camera.

Components

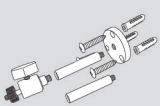
1. Mini Portable Security Recorder (Mini PSR)

2. Video Cable

3. Power Adapter DC 12V/1A

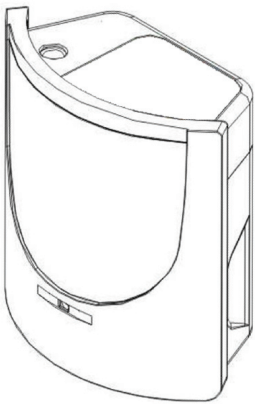
4. 2GB SD Card

5. Mounting Hardware 3 Screws & Anchors



6. Instruction Guide

Features



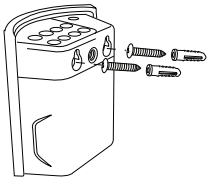
Single Channel Mini DVR with Built-In Camera

- All-in-one solution for hidden surveillance:
  1/3″ SONY SUPER HAD CCD color camera and digital recorder in PIR housing.
- High recording resolution (640 x 480 pixel).
- Automatic picture improvement by Automatic White Balance (AWB) and Automatic Gain Control (AGC).
- Manual and schedule planned recording (Motion / Continuous).
- Simple searching by Date / Time.
- Recording on a commercial SDHC-Card.
- On Screen Display (OSD) of time, date, status and modus.
- 1 Video output.
- Main operation or battery supply possible.

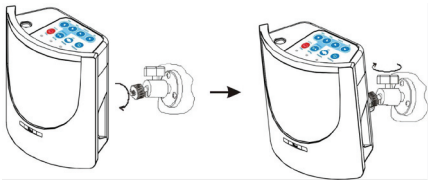
Installation

Observe the following instructions for a correction installation.

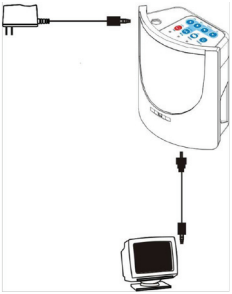
1. Bracket Installation Guide:



2. Mounting the Mini Portable Security Recorder:



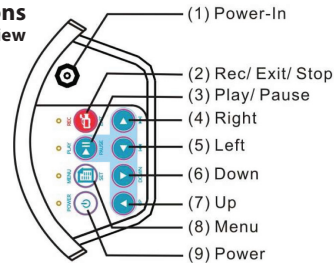
3. Video Output and Power Supply:



Operation

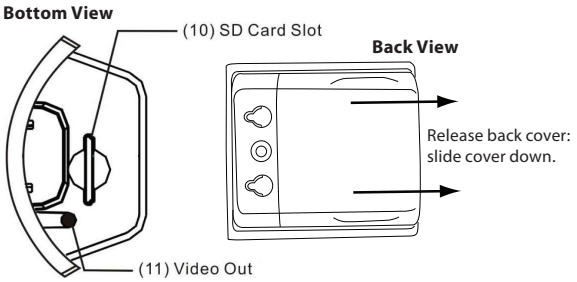
● Button Functions

Top View



No.	Name	Function
(1)	Power Input	Power Supply 12V DC/1A
(2)	Rec/Exit/Stop	LED Green: Device is recording Menu: Exit menu Live View: Start menu recording Recording: Stop recording
(3)	Play/Pause	LED Green: Playback Live View: Start playback Playback: Pause playback, press again to continue playback
(4)	Right Button	Menu: Increase value Playback: Fast forward Playback Paused: Step forward
(5)	Left Button	Menu: Decrease value Playback: Fast rewind Playback Paused: Step rewind
(6)	Down Button	Menu: Navigate down
(7)	Up Button	Menu: Navigate up
(8)	Menu Button	LED Green: Menu is open Menu: Confirm or open sub menu Live View: Open main menu
(9)	Power Button	On/Off Button. Press and hold this button to turn the recorder On/Off. LED Red: Power On

● Button Functions



No.	Name	Function
(10)	SD Card Slot	SD card storage connection *Fast Flashing: SD-Card not inserted SD-Card capacity is reached SD-Card failure SD-Card write-protected SD-Card not inserted & playback activated *Solid Green: Recording activated **WARNING!** If LED is flashing very fast, press <Enter> button to deactivate the alarm.
(11)	Video Out	Video output connection

● Initiation

1. To turn the device ON / OFF:
   • Press and hold the power button for at least 5 seconds.

2. The default menu language is English. To change the languages:
   • Select item [POWER ON SETUP] in the main menu. Here you can change the language of the menu.

3. After successful start-up the recorder shows the live view.
   • If schedule recording has been programmed the recorder will automatically continue this schedule.
   • During recording the REC LED indicator is solid green "ON".

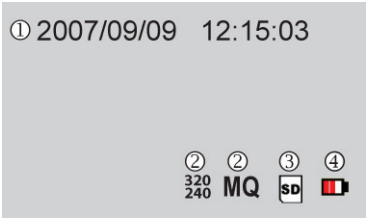
4. If the symbol [SD] is shown, the SD-Card has been recognized correctly and the recorder is ready.
   • If the SD-Card cannot be recognized the REC LED flashes red. In this case, format the SD-Card.

5. If the write-protection of the SD-Card is activated, it is only possible to read recorded data.

⚠ Attention

- Never remove the SD-Card during the boot process. This can lead to permanent damage of recorded data.

● Live View



If the video output of the device is connected with a monitor, you can view the live images on the monitor. Thereby the following information is shown:

No.	Live View Function
①	Shows the current date and time.
②	Shows the recording setup: 320 240 Shows the recording resolution MQ Shows the recording quality
③	Shows the status of the SD card: SD-Card has been removed or SD-Card cannot be recognized SD-Card is being checked SD-Card has been recognized SD-Card will be overwritten
④	Shows the battery status: 100% battery power 60% battery power 30% battery power Battery is empty and has to be recharged / DC Power Connected

⚠ Attention

- If no SD-Card is inserted only live view is possible.

● Recording View

No.	Recording View Function
①	Record Status: Device is recording data
②	Record Mode: Manual Record Motion Detection Schedule Record
③	Record Storage Mode Status: Overwrite is activated

There are three different ways to start recording:

Symbol	Mode	Start Recording Function
	Manual	Press [ ] button to start recording
	Continuous Recording	Continuous recording has been enabled
	Motion Detection	As soon as recorder detects motion, the device starts recording. Therefore, motion detection has to be setup.

Press [ ] to stop manual recording and during schedule record press [ ] button.

● **Recording View continued**

To continue the recording, proceed as follows:

Mode	Continue Recording Function
Manual	Press [ ] button again
Continuous Recording, Motion Detection	Exit playback or menu

During a recording the [ ] symbol is shown.

● Playback View

To start playback, you can decide between two different modes:

● **Playback View continued**

Normal Playback

During live view press the playback/pause [ ] button to start normal playback:

Symbol		Normal Playback Function
▶	:	Normal playback speed
◀◀ ▶▶	:	During the normal playback press [◀] or [▶] button to rewind or fast forward. By pressing in the same direction again you raise the search speed (Speed: x2/ x4/ x8/ x16/ x32). Press [▶II] button to playback at normal speed.
II	:	During playback, press [▶II] button to pause playback and press again to return to playback status.
⏮ ⏭	:	After pressing Pause button you can search picture by picture, using [◀] or [▶] button. Press [▶II] button to playback at normal speed.

Press the stop [ ] button to stop playback and return to live view.

Event List

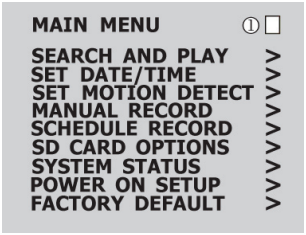
In order to open the search menu open the main menu and select the menu item SEARCH & PLAY.

No.	Event List Function
①	The file view shows the date of recording and the number of files belonging to the recording. To navigate press the direction button up or down and press [ ] button to playback. To return to the selection mode press the stop button.
②	Shows the number of pages.
③	Record Mode: Manual Record Motion Detection Schedule Record
④	Press the direction button right or left in order to show the first picture of the event.
⑤	Shows the time of the recording.

Playback Using a Computer

All files on the SD-Card are stored in a folder named DVMPG4. These files can be watched with Microsoft® Windows Media Player. In order to playback the files correctly, update the audio and video codec of the Windows Media player.

● Main Menu

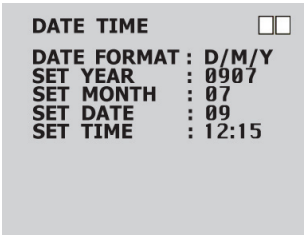


① In the top right corner the menu level is shown:

□	First level (main menu)
□□	Second level
□□□	Third level

– Press [▲] or [▼] buttons to navigate.
– To confirm or select press [☰] button.
– Press [◀] or [▶] buttons to change the value.
– Press [↩] button to leave the menu.

● Date/Time Setup

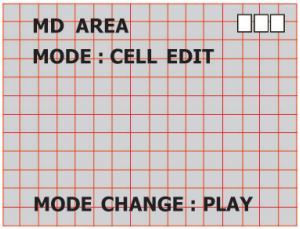


- **Date Format** : Here you can change the way the date is displayed.
- **Date/Time Adjustment** : Here you can change the date and time.

● Motion Setup

Set MD Area

The motion detection area is split up into 16 x 12 cells. Cells which are marked to detect motion are displayed in red.



● **Motion Setup continued**

In order to navigate use [▲ ▼ ◀ ▶] buttons and confirm by pressing [ ] button. Press [ ] playback button in order to change the editing mode.

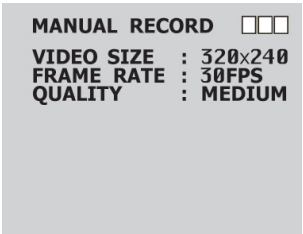
- **CELL EDIT** : Here you can (de-) activate every single cell.
- **DEL BLOCK** : Here you can deactivate a complete block of cells.
- **DEL ALL** : Here you can deactivate all cells at once.
- **ADD BLOCK** : Here you can activate a complete block of cells.
- **ADD ALL** : Here you can activate all cells at once.

Set MD Sensitivity

Here you can set the sensitivity of motion detection.

- **MD ENERGY** : Shows the current recognized motion.
- **MD THRESHOLD** : By pressing the buttons [◀] or [▶] you can set the value when motion detection is triggered. The lower the value is set the more sensitive motion detection reacts.

● Manual Record



● **Manual Record continued**

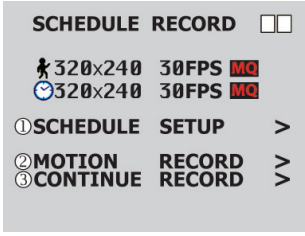
– **VIDEO SIZE / FRAME RATE:**
Here you can change the video size and frame rate for the manual recording.

Video Size	320 x 240	640 x 480
Max. Frame Rate	30 fps	12 fps

– **QUALITY:**
Here you can choose between three recording qualities:
• High • Medium • Low

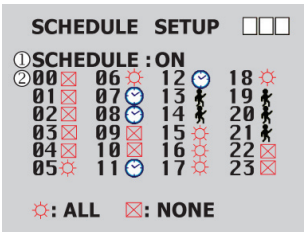
● Schedule Record

Here you can see a short summary of the settings for motion and continuous recording.



No.	Mode	Schedule Record Function
①	SCHEDULE SETUP	Activate / Deactivate the schedule and the recording settings.
②	MOTION RECORD	Settings for the motion detection.
③	CONTINUE RECORD	Settings for continuous recording.

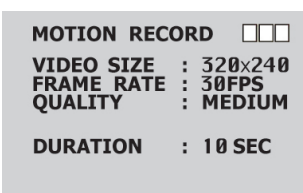
Schedule Setup



No.	Mode	Schedule Setup Function
①	SCHEDULE	Recording ON / OFF (default value is OFF)
②	00 - 23	With [▲] and [▼] buttons you can navigate between the hours. Press [◀] or [▶] to change the recording types. : Motion detection : Continuous recording : All modes active : No mode active

Motion Record

Here you can change the settings for the motion detection.



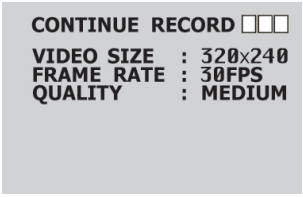
● **Motion Record continued**

– **Motion record functions:**

- **VIDEO SIZE** : Here you can set the recording resolution.
- **FRAME RATE** : Here you can set up how many fps to be recorded.
- **QUALITY** : Here you can set the recording quality.
- **DURATION** : Here you can set how long the device shall record after motion has been detected.

Continue Record

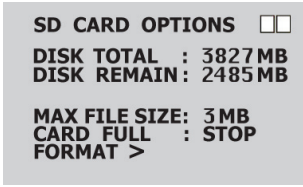
Here you can change the settings for the continuous recording.



– **Continuous record functions:**

- **VIDEO SIZE** : Here you can set the recording resolution.
- **FRAME RATE** : Here you can set up how many fps to be recorded.
- **QUALITY** : Here you can set the recording quality (LOW / MEDIUM / HIGH). The higher the quality, the better the playback image, but the recording requires more space.

● SD-Card

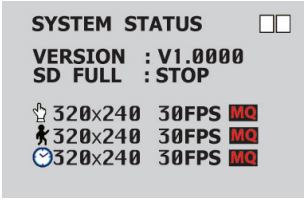


– **SD-Card functions:**

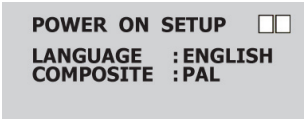
- **DISK TOTAL** : Shows the total capacity of the inserted SD-Card.
- **DISK REMAIN** : Shows the remaining capacity of the inserted SD-Card.
- **MAX FILE SIZE** : Here you can set the max. file size (3 ~ 100 MB) of a recording. If the size is reached a new file is created.
- **CARD FULL** : Here you can choose what happens when the total capacity of the SD-Card is reached:
  - STOP : The recording is stopped.
  - LOOP : The recording continues. The oldest files are replaced by the new recordings.
- **FORMAT** : Here you can format the SD-Card. All recordings will be deleted.

● System Status

Here you can find a quick summary of the firmware version and the recording settings. Press any key to return to the main menu.



● Power on Setup

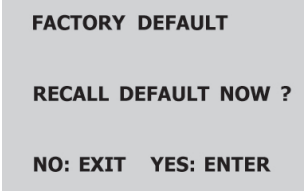


– **Power On Functions:**

- **LANGUAGE :** Here you can set the OSD menu language.
- **COMPOSITE :** Here the video standard for the video output is shown.

● Factory Settings

Here you can reset all settings, except Date and Time, to factory default.



– Press [ ] button to reset to factory default.

– To back up, press [ ] button and return to the main menu.

Troubleshooting

If you have trouble operating your camera, refer to the following table. If the guidelines do not enable you to solve the problem, contact Clinton Electronics Technical Support at 1-800-549-6393 or 815-633-1444.

Problem	Solution
Why is the power button not functioning?	• The battery power is empty, battery needs to be recharged. • Press the power button for 5 seconds to power-on the device. After 2-3 seconds of initialization, the image will be displayed.
Why does it auto power-off when using external power to power-on?	• It is because the battery is in a state of completely releasing power. To enable normal power-on, recharge the power device for 20-30 sec. before power-on.
Why does the system auto reboot during normal operation?	• It indicates that an SD Card error has been detected. To enable data completeness, monitoring procedure will reboot the device. After device reboot the system returns to the status before reboot (ie. returns to Manual Record or Schedule Record).

Specifications

Camera	CE-RP1
Image Sensor	1/3" SONY (Super HAD) CCD
Resolution	420 TV Lines
Lens	3.7mm / Pin Hole Lens / F2.0
Horizontal Viewing Angle	71°
Minimum Illumination	0.2 Lux
S/N Ratio	46dB
Color - B/W	Color
Digital Signal Processor	DSP
White Balance Control	AWB
Gain Control	AGC
DVR	
Video Format	NTSC
Video Compression	MPEG4-SP, ASF File Format
Recording Frame Rate	30 / 12 Frames per Second
Recording Resolution	VGA (640 x 480) at 12 FPS / QVGA (320 x 240) at 30 FPS
Recording Quality	High / Medium / Low
Recording Mode	Manual / Schedule (Motion Detection / Continuous)
Storage Media	SDHC-Card
Memory Full	Selectable Function: Full Stop / Overwrite
Playback Mode	Manual / Event List
Search Method	Date and Time
Motion Detection	Adjustable Sensitivity
Connectors	Video Out / Power Supply
Power Requirement	12VDC / 1A
Operating Temperature	41°F ~ 104°F

Information in this document is subject to change

Possible Recording Time

1GB SD-Card (example)	Frame Rate / Resolution / Quality	30 fps at 320x240	12 fps at 640x480
	High	150 Min.	155 Min.
	Medium	380 Min.	280 Min.
	Low	600 Min.	340 Min.

MEMO

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